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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,789	12/29/2000	Takashi Miyachi	201413US2PCT	5001

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EXAMINER

NGUYEN, HUNG

ART UNIT PAPER NUMBER

2851

DATE MAILED: 07/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/720,789

Examiner

Hung Henry V Nguyen

Applicant(s)

MIYACHI, TAKASHI

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 16-22, 27 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 23-26, 28, 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I (claims 1-15, 23-26, 28 and 30) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that "there is no serious burden in searching and examining the entire application". This is not found persuasive because MPEP section 806.05 (d) clearly states that the inventions are distinct if it can be shown that the apparatus as claimed can be used to practice another and materially different process. Applicant's remarks do not address that claimed apparatus can not be used to practice another and materially different process and as such are not convincing to any error in the restriction. Fact that "a search may be made of a large number of, or theoretically all, subclasses without significant additional effort by electronic searching" does not mean that the distinct and separate searches are not quite extensive and do not place a serious burden on the Examiner in regard to both search and examination.

The requirement is still deemed proper and is therefore made FINAL.

Abstract

2. The abstract of the disclosure is objected to because the abstract does not specifically reflect the scanning exposure method as claimed. It is noted that the abstract includes reference characters which are not enclosed within parentheses. Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element should be enclosed within parentheses so as to avoid confusion. Correction is required.

Claim Objections

3. Claim 24 is objected to because of the following informalities: reference to “according to claim 24” should read --according to claim 23--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-6, 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 3, the recitation of “a tilt control...is performed by following-up the synchronous moving, and a second mode....is not performed by following-up the synchronous moving” is ambiguous and not clearly understood.

With regard to claim 11, the recitation of “on a decision that said focus control can not follow-up said synchronous moving.....is maintained, is performed” is vague and not clearly understood.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in

section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1-3, 7-15, 23-26, 28 and 30 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Wakamoto et al (U.S.Pat. 6,277,533).

With respect to claims 1-3, 7-15, 23-26, 28 and 30, Wakamoto et al discloses a scanning exposure method for transferring a predetermined pattern formed on a reticle (7) onto a wafer (W) via a projection optical system (PL), while the reticle and the wafer are moved in synchronization and comprising all basic features of the instant claims including: deciding a focusing control mode from a plurality of focusing control modes such as focus position control, auto leveling mode, tilt control mode etc... based on the detected surface conditions of a plurality of divided regions on the wafer in the direction along the optical axis of the projection optical system (PL). Wakamoto further teaches measuring the convex and concave information on the wafer surface and the inclination of wafer is determined based on the detected information (see col.9, lines 30-48).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 7-15, 23-26, 28 and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tanaka (JP-09306823A).

With regard to claims 1-3, 7-15, 23-26, 28 and 30, Tanaka discloses a scanning exposure method comprising all of the limitations of the instant claims including steps of detecting a surface condition of the divided regions of a wafer and calculating measured values for each of the divided regions and determining factors/focus modes based on measured values.

Allowable Subject Matter

9. Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record either alone or in combination neither discloses nor makes obvious a scanning exposure method comprising particular steps satisfying conditions as recited in claims 4-6 of the instant invention.

Prior Art Made of Record

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Imai (U.S.Pat. 6,117,598), Kawakubo et al (U.S.Pat. 5,654,553) and Suzuki et al (U.S.Pat. 5,412,214) discloses scanning exposure apparatus/method, each of which comprises substantially all limitations as recited in the above rejected claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 703-305-6462. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847.

Art Unit: 2851

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.


Hung Henry V. Nguyen
Examiner
Art Unit 2851

hvn
July 12, 2002